REMARKS

This application has been carefully reviewed in light of the above-referenced Office Action in which all claims remaining after restriction were rejected. Applicants respectfully traverse the rejections and requests reconsideration in view of the following:

Interview Request

Applicant's representatives respectfully request the courtesy of a personal or telephonic interview with the Examiner to resolve any matters not resolved in this response.

The Provisional Double Patenting Rejection

Applicants submit herewith an executed terminal disclaimer that obviates this rejection. Hence, removal of the rejection is believed appropriate and is respectfully requested.

The Herley Reference as contrasted with Applicants' teachings

The equivalent of this reference in the form of the published application (US2002/0108035) was submitted in this application by Applicants in an Information Disclosure Statement. Applicants were aware of this reference and the claims of the present application were drafted to assure that they circumvent this reference.

Herley describes a technique in which selected portions of content such as a picture or video image are selected as depicted in Figs. 3 and 4 for encryption. Those selected segments are encrypted and placed in a separate file from the remaining portion of the file. Both files can then be transmitted to a recipient who decrypts the encrypted file and combines it with the other file to reconstruct the original data.

This is a technique that Applicants and others refer to as "selective encryption". This technique differs from Applicants' claimed invention in that Applicants have discovered what is termed "multiple selective encryption" or "multiple partial encryption" (or similar terms). This discovery is described in the specification, but briefly and
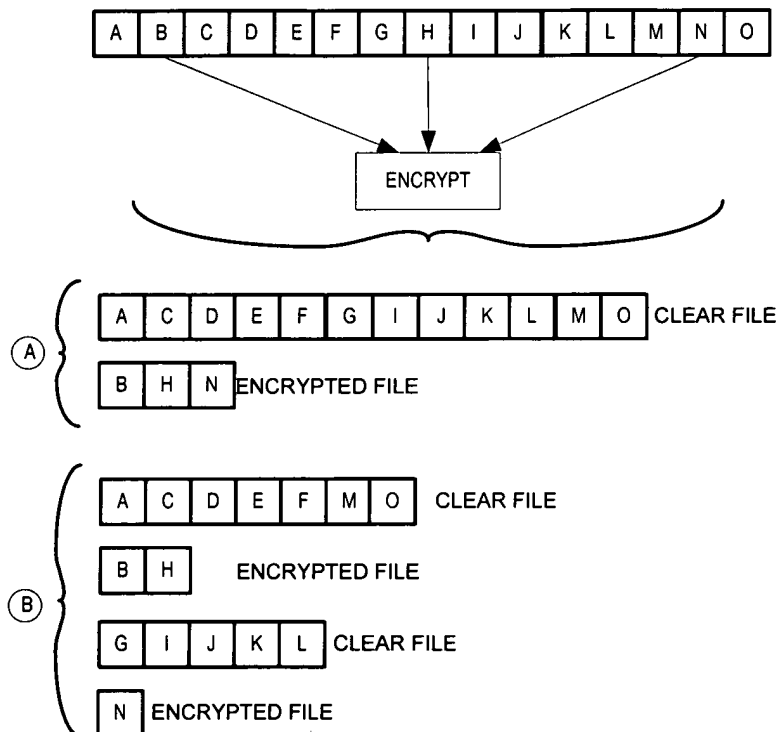
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without intent to impose any limitation, in certain embodiments, segments of the content are selected according to a selection criteria. Those selected segments are then encrypted using at least two encryption methods so that where a single selected segment appeared in the original content, multiple copies of the content encrypted using multiple encryption methods are created and inserted in place of the originally selected segments. Thus, for example, where one clear segment previously existed, two or more encrypted segments (containing the same content encrypted under different encryption methods) are inserted. In certain embodiments, this permits the same content to be used by receiver devices having capabilities of decrypting either of the encrypted segments – thus permitting the same content to be used with multiple receiver devices at a cost of only a few percent of the available bandwidth.

The Rejections under 35 U.S.C. §102

Claims 1-22, 24-39 and 98-101 were rejected as anticipated by the Herley reference. The Herley reference and an exemplary embodiment of the claimed invention are described above. Applicants respectfully request reconsideration in view of the following:

Regarding claim 1, Applicants respectfully traverse the rejection. The Office Action asserts that Herley discloses "a plurality of encrypted samples of the television program, the samples being encrypted under a first encryption method (col. 3, lines 1-6, 24-29)" and "a duplicate of the plurality of encrypted samples of the television program, the duplicate of the plurality of the plurality of encrypted samples being under a second encryption method and an unencrypted portion (fig. 2 and col. 3, lines 1-6, 24-29)." However, this is not an accurate portrayal of Herley's teachings at col. 3, lines 1-6 and 24-29 and fig. 2. This passage merely indicates that instead of splitting the original file into two files (see above – one encrypted and one clear), the file could be split into any number of files, which can be encrypted using the same or different encryption. To illustrate graphically, Herley's example illustrates the following. In the figure below, the

output as described in Herley is depicted as circled "A". The statement referenced in the Office action, simply means that the original file (at the very top) could be split into any number of files as shown in circled "B", and that the encryption used for the two encrypted files illustrated below could be different or the same. The teachings referenced teach and suggest nothing more.

| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O |

ENCRYPT

(A)
| A | C | D | E | F | G | I | J | K | L | M | O | CLEAR FILE

| B | H | N | ENCRYPTED FILE

(B)
| A | C | D | E | F | M | O | CLEAR FILE

| B | H | ENCRYPTED FILE

| G | I | J | K | L | CLEAR FILE

| N | ENCRYPTED FILE

Referring now to Applicants' claims, first note that Herley never encrypts a single selected segment (e.g., B, H and N in the example above) using more than one encryption mechanism. Second, note that Herley never assembles the final selectively encrypted content into a single file, but instead, chooses to keep the encrypted segments in a separate file from unencrypted segments. The output streams shown in Fig. 4 and Fig. 7, for example, are illustrative of embodiments consistent with Applicants' claims. Note that in each example, two duplicate packets encrypted under different encryption methods appear in the output streams (EA and EB).

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Claim 1 clearly requires that the content be a "television signal" wherein "a plurality of encrypted samples of the television program, the samples being encrypted under a first encryption method; a duplicate of the plurality of encrypted samples of the television program, the duplicate of the plurality of encrypted samples being encrypted under a second encryption method; and an unencrypted portion." Hence, a single sample is duplicated and encrypted using both a first and a second encryption method to create first and second encrypted copies of the sample. These features are not met by Herley, hence there can be no anticipation.

Regarding claim 2, the Office Action submits that col. 4, lines 3-9 teach the additional features thereof. However, the cited passage in fact clearly has no such teaching or suggestion. In the cited passage, Herley explains that two separate files are transmitted to the recipient, and makes no disclosure or suggestion of the duplicated and encrypted portions. Thus, there can be no anticipation.

Regarding claims 3 and 4, the Office Action asserts that fig. 2 and col. 3, lines 1-6, 24-29; col 4, lines 51-53 teach the features added by these claims. The undersigned has examined these cited passages and finds no such teaching or suggestion. The term PID or Packet Identifier are well understood terms in the art of digital video. Not only does the cited passage and figure fail to teach this feature, but a word search of Herley fails to reveal use of either the term "PID" or "Packet Identifier", and the undersigned is unable to identify any equivalent teaching or suggestion. Hence, claims 3 and 4 cannot be anticipated.

Regarding claim 6, the above remarks regarding claim 1 are equally applicable and claim 6 is not anticipated. The language of claim 6 has been amended, however, to provide greater clarity.

Regarding claim 7, as previously noted, Herley in fact fails to teach or suggest multiple encrypted packets, hence this claim is not anticipated.

Regarding claims 8 and 9, the above remarks regarding claims 3 and 4 are equally applicable, hence these claims are not anticipated.

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Regarding claim 10, a minor amendment is made to claim 10 to assure proper and explicit antecedent basis without change in the meaning of the claim. While Herley does suggest encryption of less than 100% of the content being encrypted, he fails to teach or suggest anything about multiple encryption ("encrypting the identified content portion according to a first encryption method to produce a first encrypted content portion; encrypting the identified content according to a second encryption method to produce a second encrypted content portion"). Additionally, Herley teaches against "combining an unencrypted content portion along with the first and second encrypted content portions to produce partially multiple encrypted content" as called for in the claim. Herley explicitly teaches that the encrypted parts and the unencrypted parts are kept in separate files. Hence, there can be no anticipation.

Regarding claims 11, 12, 13 and 14, the remarks regarding claim 10 are equally applicable, so there is no anticipation.

Regarding claims 15, 16, 17 and 18, the undersigned has examined the cited portions of Herley and fails to find the teachings asserted in the Office Action. Additionally, the remarks regarding claim 10 are equally applicable. Hence, there is no anticipation.

Regarding claims 19-22 and 24-29, the Office Action asserts that Herley discloses sequentially selecting each program for a period of time for encryption. The undersigned has carefully inspected fig. 2 and Herely in its entirety and finds no such teaching or suggestion. Additionally, the remarks regarding claims 10, 1, 2, 3 and 4 at least are applicable to certain of these claims. Clearly, there is no anticipation.

Regarding claim 30, the remarks regarding claim 1 are equally applicable, and the claim is clearly not anticipated by Herley.

Regarding claims 31-34 and 39 the remarks regarding claim 30 are equally applicable, and there is clearly no anticipation.

Regarding claims 35, 36 and 37, again there is no teaching, suggestion or even a hint of encrypting replicated portions in Herley. The remarks about claim 30 are equally relevant. There is no anticipation.

Regarding claim 38, Herley is totally silent on any aspect of packet identifiers, thus the remarks regarding claims 3 and 4, as well as claim 30 are equally relevant. There is no anticipation.

Regarding claims 98 and 99, the remarks regarding claim 1 are reiterated. There is no teaching, suggestion or even a hint of encrypting duplicate packets using multiple encryption methods. Clearly, there is no anticipation.

Regarding claims 100 and 101, again Herley is totally silent on any aspect of packet identifiers. Hence, the remarks relating to claims 3 and 4 are equally relevant.

The Rejection under 35 U.S.C. §103

Claim 23 was rejected as obvious in view of Herley. Applicant respectfully traverses on the following grounds:

Regarding claim 23, the Office Action takes Official Notice that compression of data is well known in the art. Applicants note that claim 23 depends from claim 10, and that claim 10 calls for "encrypting the identified content portion according to a first encryption method to produce a first encrypted content portion; encrypting the identified content according to a second encryption method to produce a second encrypted content portion; and combining an unencrypted content portion along with the first and second encrypted content portions to produce partially multiple encrypted content." As noted above, Herley fails to teach or suggest encrypting identified content using two encryption methods. Furthermore, Herley fails to teach combining the unencrypted content with first and second encrypted content. In fact, Herley explicitly teaches keeping the encrypted portions and unencrypted portions in separate files. Hence, there is not only no suggestion in Herley for making the above claim elements, but there is in fact a teaching against combining the claim elements.

Applicant wishes to explicitly point out that the language of claim 10 (as well as others) explicitly uses antecedent basis to establish that the same content is encrypted under multiple encryption methods. That is, first "an identified content portion" is identified; the identified content portion is encrypted to produce a first encrypted content

portion; and <u>the</u> identified content portion is encrypted to produce a second encrypted content portion. By this language it is believed clear that the identified portion is encrypted twice to produce two different encrypted portions of content. Herley fails to teach, suggest or even imply this, and fails to teach, suggest or imply any reason to do this. Hence, it is believed clear that all claim elements are not fully considered including each word of the claims in considering the claims as a whole. Accordingly, it is believed clear that *prima facie* obviousness has not been established. Reconsideration and allowance are respectfully requested at an early date.

Claim Amendments / Interview Request

From the above discussion, it is clear that the current Office Action fails to establish *Prima Facie* unpatentability of any of the claims at issue. However, in the event the Examiner is interpreting the claim language in a manner inconsistent with the present arguments, Applicants respectfully request the courtesy of a telephone call and/or a personal interview. Applicants are more than happy to travel to the Patent Office to resolve any unresolved issues and is furthermore happy to accommodate clarifying amendments to assure that the claims are interpreted as intended.

No amendments have been made by this response, for purposes of patentability. The amendment made was to assure clarity in the language.

Concluding Remarks

In view of the above remarks, all claims are believed clearly allowable.

Reconsideration and allowance are requested at an early date.

Respectfully submitted,

Jerry A. Miller
Registration No. 30,779

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Please Send Correspondence to:
Jerry A. Miller
Miller Patent Services
2500 Dockery Lane
Raleigh, NC 27606
Phone: (919) 816-9981
Fax: (919) 816-9982
Customer Number 24337